What is claimed is:

1. A compound of formula I:

or a pharmaceutically acceptable salt, ester, amide, or prodrug thereof, wherein:

R1 is selected from H, a halogen, SH, and OH;

R² is selected from H, a halogen, a NR¹²R¹³, a sulfonamide, a nitro, a formyl, an acyl, a C₁-C₃ alkyl optionally substituted with one or more fluorines, a C₂-C₃ alkenyl optionally substituted with one or more fluorines, a C₂-C₃ akynyl, optionally substituted with one or more fluorines, a C₁-C₂ alkoxy optionally substituted with one or more fluorines, a C₂ alkenyl optionally substituted with one or more fluorines, a C₂ alkenyl optionally substituted with one or more fluorines, a C₂ akynyl optionally substituted with one or more fluorines, and a hydroxylamine optionally substituted with a C₁-C₂ alkyl, a C₂ alkenyl, a C₂-akynyl, a C₁-C₂ fluoroalkyl, a C₂ fluoroalkenyl, or a C₂ akynyl;

 $m R^3$ is selected from H, a halogen, a nitro, a C_1 - C_{10} alkyl optionally substituted with one or more halogens, C_2 - C_{10} alkenyl optionally substituted with one or more halogens, C_2 - C_{10} akynyl optionally substituted with one or more halogens, a C_1 - C_{10}

alkoxy optionally substituted with one or more halogens, a C₁-C₁₀ thioalkyl optionally substituted with one or more halogens, a C₂-C₁₀ thioalkenyl optionally substituted with one or more halogens, C₂-C₁₀ thioakynyl optionally substituted with one or more halogens, a NR¹⁴R¹⁵, and a five to six-membered carbocyclic or heterocyclic ring optionally substituted with up to two R¹⁹ groups;

R⁴ is selected from H, a halogen, and OH;

R⁵ is selected from CH₂OH, CHO, COOH, and a C(R⁵)(R⁵)(COOH);

R^{5'} and R^{5"} are each independently selected from H, O, S and F; or R^{5'} and R^{5"} together form an O or S;

 R^6 and R^7 are each independently selected from H, a halogen, a C_1 - C_{12} alkyl optionally substituted with one or more R^{19} , a C_2 - C_{12} alkenyl optionally substituted with one or more R^{19} , a C_2 - C_{12} akynyl optionally substituted with one or more R^{19} , a C_1 - C_{12} alkoxy optionally substituted with one or more R^{19} , a C_1 - C_{12} thioalkyl optionally substituted with one or more R^{19} , a C_2 - C_{12} thioalkenyl optionally substituted with one or more R^{19} , a C_2 - C_{12} thioakynyl optionally substituted with one or more R^{19} , a R^{16} and R^{17} , a R^{16} and R^{19} and null; or R^{6} and R^{7} taken together form an R^{19} , a R^{19} , a R^{10}

 R^8 and R^9 are each independently selected from H, halogen, a methyl optionally substituted with one or more halogens, and null; or R^8 and R^9 taken together with Y form a three to five-membered optionally substituted carbocyclic ring;

each R¹⁰ is independently selected from H, a halogen, and a methyl optionally substituted with one or more halogens;

R¹¹ and R¹¹ are each independently selected from H, a halogen and OH; or R¹¹ and R¹¹ taken together form an O;

 R^{12} and R^{13} are each independently a C_1 - C_3 alkyl, optionally substituted with one or more halogens, a C_2 - C_3 alkenyl optionally substituted with one or more halogens, or a C_2 - C_3 akynyl optionally substituted with one or more halogens; or R^{12} and R^{13} taken together with the nitrogen atom to which they are both bound form a five to sixmembered heterocyclic ring;

R¹⁴ and R¹⁵ are each independently selected from a C₁-C₂ alkyl optionally substituted with one or more halogens, a C₂ alkenyl optionally substituted with one or more halogens, and C₂ akynyl optionally substituted with one or more halogens;

 R^{16} and R^{17} are each independently selected from a C_1 - C_{12} alkyl optionally substituted with one or more R^{19} , a C_2 - C_{12} alkenyl optionally substituted with one or more R^{19} , C_2 - C_{12} akynyl optionally substituted with one or more R^{19} , and a five to sixmembered carbocyclic or heterocyclic ring optionally substituted with one or more R^{19} ; or R^{16} and R^{17} taken together with the nitrogen atom to which they are both bound form a five to six-membered heterocyclic ring;

R¹⁸ is selected from a C₁-C₁₀ alkyl optionally substituted with one or more halogens, a C₂-C₁₀ alkenyl optionally substituted with one or more halogens, a C₂-C₁₀ akynyl optionally substituted with one or more halogens, and a five to six-membered carbocyclic or heterocyclic ring optionally substituted with one or more R¹⁹:

R¹⁹ is selected from a halogen, a C₁-C₄ alkyl optionally substituted with one or more fluorines, a C₂-C₄ alkenyl optionally substituted with one or more fluorines, C₂-C₄

akynyl, optionally substituted with one or more fluorines, a C_1 - C_4 alkoxy optionally substituted with one or more halogens, a C_1 - C_3 thioalkyl optionally substituted with one or more halogens, a C_2 - C_3 thioalkenyl optionally substituted with one or more halogens, a C_2 - C_3 thioakynyl optionally substituted with one or more halogens, a formyl and a nitro;

X and Y are each independently selected from O, S, N and C;

wherein:

if X is O or S, then each of R⁶ and R⁷ is null;

if X is N, then one of R⁶ and R⁷ is null;

if Y is O or S, then each of R⁸ and R⁹ is null; and

if Y is N, then one of R⁸ and R⁹ is null.

2. The compound of claim 1, wherein:

R¹ is H or halogen;

 R^2 is selected from H, a halogen, a C_1 - C_2 alkyl optionally substituted with one or more fluorines, a C_1 - C_2 alkoxy optionally substituted with one or more fluorines, a C_1 - C_2 thioalkyl optionally substituted with one or more fluorines, and a $NR^{11}R^{12}$;

 R^3 is selected from H, a halogen, a C_1 - C_2 alkyl optionally substituted with one or more halogens, a C_1 - C_2 alkoxy optionally substituted with one or more halogens, a C_1 - C_2 thioalkyl optionally substituted with one or more halogens, and a $NR^{13}R^{14}$;

R⁴ is H or a halogen;

R⁵ is CH₂OH, COOH or a C(R⁵)(R⁵)(COOH);

 $R^{5'}$ and $R^{5''}$ are each independently selected from H and F; or $R^{5'}$ and $R^{5''}$ together form an O or S; and

 R^6 and R^7 are each independently selected from H, a halogen, a C_1 - C_2 alkyl optionally substituted with one or more R^{19} , a C_1 - C_2 alkoxy optionally substituted with one or more R^{19} , a C_1 - C_2 thioalkyl optionally substituted with one or more R^{19} , a R^{16} and a R^{17} and a R^{17} and a R^{17} and a R^{19} and a R^{19} are each independently selected from H, a halogen, a R^{19} alkyl optionally substituted with one or more R^{19} , a R^{19} and a R^{19} and a R^{19} and a R^{19} taken together form an R^{19} and R^{19} and a R^{19} taken together form an R^{19} and R^{19} and a R^{19} taken together form an R^{19} and R^{19} and a R^{19} taken together form an R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} and R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} a

3. The compound of claim 2, wherein:

R¹⁰ is H or halogen;

R¹¹ and R¹¹ are each independently selected from H and a halogen; or R¹¹ and R¹¹ taken together form an O;

 R^{12} and R^{13} are each independently selected from a C_1 - C_3 alkyl optionally substituted with one or more halogens, a C_2 - C_3 alkenyl optionally substituted with one or more halogens, a C_2 - C_3 akynyl optionally substituted with one or more halogens;

 R^{16} and R^{17} are each independently selected from a C_2 - C_4 alkyl optionally substituted with one or more R^{19} , a five to six membered carbocyclic or heterocyclic ring optionally substituted with one or more R^{19} .

4. The compound of claim 3, wherein:

X is C or N.

5. The compound of claim 3, wherein:

X is O or S.

6. The compound of any one of claims 4 and 5, wherein:

Y is C or N.

7. The compound of any one of claims 4 and 5, wherein:

Y is O or S.

- 8. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 1.
- A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 2.
- 10. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound according to claim 3.
- 11. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 4.
- 12. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 5.
- 13. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 6.
- 14. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 7.
- 15. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 11.

16. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 2.

- 17. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 3.
- 18. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 4.
- 19. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 5.
- 20. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 6.
- 21. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 7.
- 22. The method according to any one of claims 15-21, wherein said method comprises treating said patient for a disease or condition selected from the group consisting of: syndrome X, non-insulin dependent diabetes mellitus, cancer, obesity, cardiovascular disease and dyslipidemia.
- 23. A compound of formula II:

or a pharmaceutically acceptable salt, ester, amide, or prodrug thereof, wherein:

R¹ is selected from H, a halogen, SH, and OH;

R² is selected from H, a halogen, a NR¹²R¹³, a sulfonamide, a nitro, a formyl, an acyl optionally substituted with one or more halogens, a C₁-C₃ alkyl optionally substituted with one or more fluorines, a C₂-C₃ alkenyl optionally substituted with one or more fluorines, a C₂-C₃ akynyl optionally substituted with one or more fluorines, a C₁-C₂ alkoxy optionally substituted with one or more fluorines, a C₁-C₂ thioalkyl optionally substituted with one or more fluorines, a C₂ thioalkenyl optionally substituted with one or more fluorines, a C₂ akynyl optionally substituted with one or more fluorines, and a hydroxylamine optionally substituted with a C₁-C₂ alkyl, a C₂ alkenyl, a C₂ akynyl, a C₁-C₂ fluoroalkyl, a C₂ fluoralkenyl, or a C₂ fluoroakynyl,;

 R^3 is selected from H, a halogen, a nitro, a C_1 - C_{10} alkyl optionally substituted with one or more halogens, a C_2 - C_{10} alkenyl optionally substituted with one or more halogens, a C_2 - C_6 akynyl optionally substituted with one or more halogens, a C_1 - C_{10} alkoxy optionally substituted with one or more halogens, a C_1 - C_{10} thioalkyl optionally substituted with one or more halogens, a C_2 - C_{10} thioalkenyl optionally substituted with one or more halogens, a C_2 - C_{10} thioalkynyl optionally substituted with one or more

halogens, a NR¹⁴R¹⁵, and a five to six-membered carbocyclic or heterocyclic ring optionally substituted with up to two R¹⁹ groups;

R⁴ is selected from H, a halogen, and OH;

R⁵ is selected from CH₂OH, CHO, COOH, and a C(R⁵)(R⁵)(COOH);

 $R^{5'}$ and $R^{5''}$ are each independently selected from H, O, S and F; or $R^{5''}$ and $R^{5''}$ together form an O or S;

 R^6 and R^7 are each independently selected from H, a halogen, a C_1 - C_{12} alkyl optionally substituted with one or more R^{19} , a C_2 - C_{12} alkenyl optionally substituted with one or more R^{19} , a C_2 - C_{12} akynyl optionally substituted with one or more R^{19} , a C_1 - C_{12} alkoxy optionally substituted with one or more R^{19} , a C_1 - C_{12} thioalkyl optionally substituted with one or more R^{19} , a C_2 - C_{12} thioalkenyl optionally substituted with one or more R^{19} , a C_2 - C_{12} thioakynyl optionally substituted with one or more R^{19} , a R^{16} and R^{17} , a R^{16} and R^{17} taken together form an R^{19} , a R^{19} and R^{19} taken together form an R^{19} , a R^{19} and R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} and R^{19} and R^{19} taken together form an R^{19} and R^{19} and R^{19} taken together form an R^{19} taken together fo

R⁸ and R⁹ are each independently selected from H, halogen, a methyl optionally substituted with one or more halogens, and null; or R⁸ and R⁹ taken together with Y form a three to five-membered optionally substituted carbocyclic ring;

R¹² and R¹³ are each independently C₁-C₃ alkyl optionally substituted with one or more halogens, a C₂-C₃ alkenyl optionally substituted with one or more halogens, or a C₂-C₃ akynyl optionally substituted with one or more halogens; or R¹² and R¹³ taken together with the nitrogen atom to which they are both bound form a five to six-membered heterocyclic ring;

 R^{14} and R^{15} are each independently a C_1 - C_2 alkyl optionally substituted with one or more halogens, a C_2 alkenyl optionally substituted with one or more halogens, or a C_2 akynyl optionally substituted with one or more halogens;

R¹⁶ and R¹⁷ are each independently selected from a C₁-C₁₂ alkyl optionally substituted with one or more R¹⁹, a C₂-C₁₂ alkenyl optionally substituted with one or more R¹⁹, a C₂-C₁₂ akynyl optionally substituted with one or more R¹⁹, and a five to six-membered carbocyclic or heterocyclic ring optionally substituted with one or more R¹⁹; or R¹⁶ and R¹⁷ taken together with the nitrogen atom to which they are both bound form a five to six-membered heterocyclic ring;

 R^{18} is selected from a C_1 - C_{10} alkyl optionally substituted with one or more halogens, a C_2 - C_{10} alkenyl optionally substituted with one or more halogens, a C_2 - C_{10} akynyl optionally substituted with one or more halogens, and a five to six-membered carbocyclic or heterocyclic ring optionally substituted with one or more R^{19} :

R¹⁹ is selected from a halogen, a C₁-C₄ alkyl optionally substituted with one or more fluorines, a C₂-C₄ alkenyl optionally substituted with one or more fluorines, a C₂-C₄ akynyl optionally substituted with one or more fluorines, a C₁-C₄ alkoxy optionally substituted with one or more halogens, a C₁-C₃ thioalkyl optionally substituted with one or more halogens, a C₂-C₃ thioalkenyl optionally substituted with one or more halogens, a C₂-C₃ thioakynyl, optionally substituted with one or more halogens, a formyl and a nitro;

X and Y are each independently selected from O, S, N and C;

wherein:

if X is O or S, then each of R⁶ and R⁷ is null:

if X is N, then one of R⁶ and R⁷ is null;

if Y is O or S, then each of R⁸ and R⁹ is null; and

if Y is N, then one of R⁸ and R⁹ is null.

24. The compound of claim 23, wherein:

R¹ is H or halogen:

R² is selected from H, a halogen, a C₁-C₂ alkyl optionally substituted with one or more fluorines, a C₁-C₂ alkoxy optionally substituted with one or more fluorines, a C₁-C₂ thioalkyl optionally substituted with one or more fluorines, and a NR¹¹R¹²;

R³ is selected from H, a halogen, a C₁-C₂ alkyl optionally substituted with one or more halogens, a C₁-C₂ alkoxy optionally substituted with one or more halogens, a C₁-C₂ thioalkyl optionally substituted with one or more halogens, and a NR¹³R¹⁴;

R⁴ is H or a halogen;

R⁵ is CH₂OH, COOH or C(R⁵)(R⁵")(COOH);

R^{5'} and R^{5''} are each independently selected from H and F; or R^{5'} and R^{5''} together form an O or S; and

 R^6 and R^7 are each independently selected from H, a halogen, a $C_1\text{-}C_2$ alkyl optionally substituted with one or more R19, a C1-C2 alkoxy optionally substituted with one or more R¹⁹, a C₁-C₂ thioalkyl optionally substituted with one or more R¹⁹, a NR¹⁶R¹⁷ and a NHC(O)R¹⁸; or R⁶ and R⁷ taken together form an O, S, NH or CH₂.

25. The compound of claim 24, wherein:

R¹² and R¹³ are each independently a C₁-C₃ alkyl C₂-C₆ alkenyl, C₂-C₆ akynyl, optionally substituted with one or more halogens;

 R^{16} and R^{17} are each independently selected from a C_2 - C_4 alkyl optionally substituted with one or more R^{19} , and a five to six membered carbocyclic or heterocyclic ring optionally substituted with one or more R^{19} .

26. The compound of claim 25, wherein:

X is C or N.

27. The compound of claim 25, wherein:

X is O or S.

28. The compound of any one of claims 26 and 27, wherein:

Y is C or N.

29. The compound of any one of claims 26 and 27, wherein:

Y is O or S.

- 30. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound according to claim 23.
- 31. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound according to claim 24.
- 32. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound according to claim 25.

33. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound according to claim 26.

- 34. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound according to claim 27.
- 35. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound according to claim 28.
- 36. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound according to claim 29.
- 37. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 23.
- 38. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 24.
- 39. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 25.
- 40. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 26.
- 41. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 27.

42. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 28.

- 43. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 29.
- 44. The method according to any one of claims 37-43, wherein said method comprises treating said patient for a disease or condition selected from the group consisting of: syndrome X, non-insulin dependent diabetes mellitus, cancer, obesity, cardiovascular disease and dyslipidemia.
- 45. A compound of formula III:

Ш

or a pharmaceutically acceptable salt, ester, amide, or prodrug thereof, wherein

R¹ is selected from H, a halogen, SH, and OH;

 R^2 is selected from H, a halogen, a $NR^{12}R^{13}$, a sulfonamide, a nitro, a formyl, an acyl optionally substituted with one or more halogens, a C_1 - C_3 alkyl optionally substituted with one or more fluorines, a C_2 - C_3 alkenyl optionally substituted with one or more fluorines, C_2 - C_3 akynyl optionally substituted with one or more fluorines, a C_1 - C_2

alkoxy optionally substituted with one or more fluorines, a C_1 - C_2 thioalkyl optionally substituted with one or more fluorines, a C_2 - C_6 thioalkenyl optionally substituted with one or more fluorines, a C_2 - C_6 thioakynyl optionally substituted with one or more fluorines, and a hydroxylamine optionally substituted with a C_1 - C_2 alkyl, a C_2 alkenyl, a C_2 akynyl, a C_1 - C_2 fluoroalkyl, a C_2 fluoroalkyl, or C_2 fluoroakynyl;

R³ is selected from H, a halogen, a nitro, a C₁-C₁₀ alkyl optionally substituted with one or more halogens, C₂-C₁₀ alkenyl optionally substituted with one or more halogens, a C₁-C₁₀ akynyl optionally substituted with one or more halogens, a C₁-C₁₀ alkoxy optionally substituted with one or more halogens, a C₁-C₁₀ thioalkyl optionally substituted with one or more halogens, C₂-C₁₀ thioalkenyl optionally substituted with one or more halogens, a NR¹⁴R¹⁵, and a five to six-membered carbocyclic or heterocyclic ring optionally substituted with up to two R¹⁹ groups;

R⁴ is selected from H, a halogen, and OH;

R⁵ is selected from CH₂OH, CHO, COOH, and a C(R⁵)(R⁵")(COOH);

 $R^{5'}$ and $R^{5''}$ are each independently selected from H, O, S and F; or $R^{5'}$ and $R^{5''}$ together form an O or S;

R⁸ and R⁹ are each independently selected from H, a halogen, a methyl optionally substituted with one or more halogens, and null; or R⁸ and R⁹ taken together with Y form a three to five-membered optionally substituted carbocyclic ring;

 R^{12} and R^{13} are each independently a C_1 - C_3 alkyl optionally substituted with one or more halogens, a C_2 - C_3 alkenyl optionally substituted with one or more halogens, or a C_2 - C_3 akynyl optionally substituted with one or more halogens; or R^{12} and R^{13} taken together with the nitrogen atom to which they are both bound form a five to sixmembered heterocyclic ring;

R¹⁴ and R¹⁵ are each independently a C₁-C₂ alkyl optionally substituted with one or more halogens, a C₂ alkenyl optionally substituted with one or more halogens, or a C₂ akynyl optionally substituted with one or more halogens;

R¹⁹ is selected from a halogen, a C₁-C₄ alkyl optionally substituted with one or more fluorines, a C₂-C₄ alkenyl optionally substituted with one or more fluorines, a C₂-C₄ akynyl, optionally substituted with one or more fluorines, a C₁-C₄ alkoxy optionally substituted with one or more halogens, a C₁-C₃ thioalkyl optionally substituted with one or more halogens, a C₂-C₆ thioalkenyl optionally substituted with one or more halogens, a C₂-C₆ thioakynyl optionally substituted with one or more halogens, a formyl and a nitro;

Y is selected from O, S, N and C;

wherein:

if Y is O or S, then each of R⁸ and R⁹ is null: and

if Y is N, then one of R⁸ and R⁹ is null.

46. The compound of claim 45, wherein:

R¹ is H or halogen:

 R^2 is selected from H, a halogen, a C_1 - C_2 alkyl optionally substituted with one or more fluorines, a C_1 - C_2 alkoxy optionally substituted with one or more fluorines, a C_1 - C_2 thioalkyl optionally substituted with one or more fluorines, and a $NR^{11}R^{12}$;

 R^3 is selected from H, a halogen, a C_1 - C_2 alkyl optionally substituted with one or more halogens, a C_1 - C_2 alkoxy optionally substituted with one or more halogens, a C_1 - C_2 thioalkyl optionally substituted with one or more halogens, and a $NR^{13}R^{14}$;

R⁴ is H or a halogen;

 $R^{5'}$ and $R^{5''}$ are each independently selected from H and F; or $R^{5'}$ and $R^{5''}$ together form an O or S.

47. The compound of claim 46, wherein:

 R^{12} and R^{13} are each independently a $C_1\text{-}C_3$ alkyl optionally substituted with one or more halogens.

48. The compound of claim 47, wherein:

Y is C or N.

49. The compound of claims 47 wherein:

Y is O or S.

- 50. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 45.
- 51. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 46.

52. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 47.

- 53. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 48.
- 54. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 49.
- 55. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 45.
- 56. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 46.
- 57. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 47.
- 58. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 48.
- 59. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 49.
- 60. The method according to any one of claims 55-59, wherein said method comprises treating said patient for a disease or condition selected from the group consisting of:

syndrome X, non-insulin dependent diabetes mellitus, cancer, obesity, cardiovascular disease and dyslipidemia.

61. A compound of formula IV:

$$\begin{array}{c|c}
R^{20} \\
\downarrow^{Z} \\
X R^{6} R^{4}
\end{array}$$

$$\begin{array}{c|c}
R^{8} R^{9} R^{2}
\end{array}$$
IV

or a pharmaceutically acceptable salt, ester, amide, or prodrug thereof, wherein:

R1 is selected from H, a halogen, SH, and OH;

R² is selected from H, a halogen, a NR¹²R¹³, a sulfonamide, a nitro, a formyl, an acyl, a C₁-C₃ alkyl optionally substituted with one or more fluorines, a C₂-C₃ alkenyl optionally substituted with one or more fluorines, a C₂-C₃ akynyl optionally substituted with one or more fluorines, a C₁-C₂ alkoxy optionally substituted with one or more fluorines, a C₂ thioalkyl optionally substituted with one or more fluorines, a C₂ thioalkenyl optionally substituted with one or more fluorines, a C₂ thioalkynyl optionally substituted with one or more fluorines, and a hydroxylamine optionally substituted with a C₁-C₂ alkyl, a C₂ alkenyl, a C₂ akynyl, a C₁-C₂ fluoroalkyl, a C₂ fluoroalkenyl, or C₂ fluoroakynyl;

 R^3 is selected from H, a halogen, a nitro, a C_1 - C_{10} alkyl optionally substituted with one or more halogens, a C_2 - C_{10} alkenyl optionally substituted with one or more halogens, C_2 - C_{10} akynyl optionally substituted with one or more halogens, a C_1 - C_{10}

alkoxy optionally substituted with one or more halogens, a C_1 - C_{10} thioalkyl optionally substituted with one or more halogens, a C_2 - C_{10} thioalkenyl optionally substituted with one or more halogens, a C_2 - C_{10} thioakynyl optionally substituted with one or more halogens, a $NR^{14}R^{15}$, and a five to six-membered carbocyclic or heterocyclic ring optionally substituted with up to two R^{19} groups;

R⁴ is selected from H, a halogen, and OH;

R⁵ is selected from CH₂OH, CHO, COOH, and a C(R⁵)(R⁵")(COOH);

R^{5'} and R^{5''} are each independently selected from H, O, S and F; or R^{5''} and R^{5''} together form an O or S;

 R^6 is selected from H, a halogen, a C_1 - C_{12} alkyl optionally substituted with one or more R^{19} , a C_2 - C_{12} alkenyl optionally substituted with one or more R^{19} , a C_2 - C_{12} akynyl optionally substituted with one or more R^{19} , a C_1 - C_{12} alkoxy optionally substituted with one or more R^{19} , a C_1 - C_{12} thioalkyl optionally substituted with one or more R^{19} , a C_1 - C_{12} thioalkyl optionally substituted with one or more R^{19} , a C_2 - C_{12} thioalkenyl optionally substituted with one or more R^{19} , a R^{16} - R^{17} - R^{18}

R⁸ and R⁹ are each independently selected from H, a halogen, a methyl optionally substituted with one or more halogens, and null; or R⁸ and R⁹ taken together with Y form a three to five-membered optionally substituted carbocyclic ring;

 R^{12} and R^{13} are each independently a C_1 - C_3 alkyl optionally substituted with one or more halogens, a C_2 - C_3 alkenyl optionally substituted with one or more halogens, or a C_2 - C_3 akynyl optionally substituted with one or more halogens; or R^{12} and R^{13} taken

together with the nitrogen atom to which they are both bound form a five to sixmembered heterocyclic ring;

R¹⁴ and R¹⁵ are each independently a C₁-C₂ alkyl optionally substituted with one or more halogens, a C₂ alkenyl optionally substituted with one or more halogens, or a C₂ akynyl optionally substituted with one or more halogens;

R¹⁶ and R¹⁷ are each independently selected from a C₁-C₁₂ alkyl optionally substituted with one or more R¹⁹, a C₂-C₁₂ alkenyl optionally substituted with one or more R¹⁹, a C₂-C₁₂ akynyl optionally substituted with one or more R¹⁹, and a five to six-membered carbocyclic or heterocyclic ring optionally substituted with one or more R¹⁹; or R¹⁶ and R¹⁷ taken together with the nitrogen atom to which they are both bound form a five to six-membered heterocyclic ring;

R¹⁸ is selected from a C₁-C₁₀ alkyl optionally substituted with one or more halogens, a C₂-C₁₀ alkenyl optionally substituted with one or more halogens, a C₂-C₆ akynyl optionally substituted with one or more halogens, and a five to six-membered carbocyclic or heterocyclic ring optionally substituted with one or more R¹⁹:

R¹⁹ is selected from a halogen, a C₁-C₄ alkyl optionally substituted with one or more fluorines, a C₂-C₄ alkenyl optionally substituted with one or more fluorines, a C₂-C₄ akynyl optionally substituted with one or more fluorines, a C₁-C₄ alkoxy optionally substituted with one or more halogens, a C₁-C₃ thioalkyl optionally substituted with one or more halogens, a C₂-C₃ thioalkenyl optionally substituted with one or more halogens, a C₂-C₃ thioakynyl, optionally substituted with one or more halogens, a formyl and a nitro;

R²⁰ is selected from a C₄-C₅ alkyl optionally substituted with one or more halogens, a C₄-C₅ alkenyl optionally substituted with one or more halogens, a C₄-C₄ akynyl optionally substituted with one or more halogens, a phenyl optionally substituted with one or more fluorines, a thienyl optionally substituted with one or more fluorines, and a benzyl optionally substituted with one or more R¹⁹;

X is selected from O and NH;

Y is selected from O, S, N, and C; and

Z is selected from CH₂, NH, and phenylene;

wherein:

if Y is O or S, then each of R⁸ and R⁹ is null; and

if Y is N, then one of R⁸ and R⁹ is null.

62. The compound of claim 61, wherein:

R¹ is H or halogen;

 R^2 is selected from H, a halogen, a C_1 - C_2 alkyl optionally substituted with one or more fluorines, a C_1 - C_2 alkoxy optionally substituted with one or more fluorines, a C_1 - C_2 thioalkyl optionally substituted with one or more fluorines, and a $NR^{11}R^{12}$;

 R^3 is selected from H, a halogen, a C_1 - C_2 alkyl optionally substituted with one or more halogens, a C_1 - C_2 alkoxy optionally substituted with one or more halogens, a fully saturated C_1 - C_2 thioalkyl optionally substituted with one or more halogens, and a $NR^{13}R^{14}$:

R⁴ is H or a halogen;

R⁵ is CH₂OH, COOH or a C(R⁵)(R⁵")(COOH);

 $R^{5'}$ and $R^{5''}$ are each independently selected from H and F; or $R^{5'}$ and $R^{5''}$ together form an O or S; and

 R^6 is selected from H, a halogen, a C_1 - C_2 alkyl optionally substituted with one or more R^{19} , a C_1 - C_2 alkoxy optionally substituted with one or more R^{19} , a C_1 - C_2 thioalkyl optionally substituted with one or more R^{19} , a $NR^{16}R^{17}$ and a $NHC(O)R^{18}$.

63. The compound of claim 62, wherein:

 R^{12} and R^{13} are each independently a C_1 - C_3 alkyl optionally substituted with one or more halogens, a C_2 - C_3 alkenyl optionally substituted with one or more halogens, a C_2 - C_3 akynyl optionally substituted with one or more halogens;

 R^{16} and R^{17} are each independently selected from a C_2 - C_4 alkyl optionally substituted with one or more R^{19} , a five to six membered carbocyclic or heterocyclic ring optionally substituted with one or more R^{19} .

64. The compound of claim 63, wherein:

X is O.

65. The compound of claim 63, wherein:

X is NH.

66. The compound of any one of claims 64 and 65, wherein:

Y is C or N.

67. The compound of any one of claims 64 and 65, wherein:
Y is O or S.

- 68. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 61.
- 69. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 62.
- 70. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 63.
- 71. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 64.
- 72. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 65.
- 73. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 66.
- 74. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 67.
- 75. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 61.
- 76. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 62.

77. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 63.

- 78. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 64.
- 79. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 65.
- 80. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 66.
- 81. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 67.
- 82. The method according to any one of claims 75-81, wherein said method comprises treating said patient for a disease or condition selected from the group consisting of: syndrome X, non-insulin dependent diabetes mellitus, cancer, obesity, cardiovascular disease and dyslipidemia.
- 83. A compound of formula V:

or a pharmaceutically acceptable salt, ester, amide, or prodrug thereof, wherein:

R¹ is selected from H, a halogen, SH, and OH;

 R^2 is selected from H, a halogen, a $NR^{12}R^{13}$, a sulfonamide, a nitro, a formyl, an acyl, a C_1 - C_3 alkyl optionally substituted with one or more fluorines, a C_2 - C_3 alkenyl optionally substituted with one or more fluorines, a C_2 - C_3 akynyl optionally substituted with one or more fluorines, a C_1 - C_2 alkoxy optionally substituted with one or more fluorines, a C_1 - C_2 thioalkyl optionally substituted with one or more fluorines, a C_2 thioalkenyl optionally substituted with one or more fluorines, a C_2 thioalkynyl optionally substituted with one or more fluorines, and a hydroxylamine optionally substituted with a C_1 - C_2 alkyl, a C_2 alkenyl, a C_2 akynyl, a C_1 - C_2 fluoroalkyl, a C_2 fluoroalkenyl, or a C_2 fluoroakynyl;

 R^3 is selected from H, a halogen, a nitro, a C_1 - C_{10} alkyl optionally substituted with one or more halogens, a C_2 - C_{10} alkenyl optionally substituted with one or more halogens, a C_1 - C_{10} alkoxy optionally substituted with one or more halogens, a C_1 - C_{10} thioalkyl optionally substituted with one or more halogens, a C_1 - C_{10} thioalkyl optionally substituted with one or more halogens, a C_2 - C_{10} alkenyl optionally substituted with one or more halogens, a C_2 - C_{10} akynyl optionally substituted with one or more halogens, a

NR¹⁴R¹⁵, and a five to six-membered carbocyclic or heterocyclic ring optionally substituted with up to two R¹⁹ groups;

R⁴ is selected from H, a halogen, and OH;

R⁵ is selected from CH₂OH, CHO, COOH, and a C(R⁵)(R⁵)(COOH);

R^{5'} and R^{5"} are each independently selected from H, O, S and F; or R^{5'} and R^{5"} together form an O or S;

R⁸ and R⁹ are each independently selected from H, a halogen, a methyl optionally substituted with one or more halogens, and null; or R⁸ and R⁹ taken together with Y form a three to five-membered optionally substituted carbocyclic ring;

 R^{12} and R^{13} are each independently a C_1 - C_3 alkyl optionally substituted with one or more halogens, a C_2 - C_3 alkenyl optionally substituted with one or more halogens, or a C_2 - C_3 akynyl optionally substituted with one or more halogens; or R^{12} and R^{13} taken together with the nitrogen atom to which they are both bound form a five to sixmembered heterocyclic ring;

R¹⁴ and R¹⁵ are each independently a C₁-C₂ alkyl optionally substituted with one or more halogens, a C₂ alkenyl optionally substituted with one or more halogens, or C₂ akynyl optionally substituted with one or more halogens;

 R^{19} is selected from a halogen, a C_1 - C_4 alkyl optionally substituted with one or more fluorines, a C_2 - C_4 alkenyl optionally substituted with one or more fluorines, or a C_2 - C_4 akynyl optionally substituted with one or more fluorines, a C_1 - C_4 alkoxy optionally substituted with one or more halogens, a C_1 - C_3 thioalkyl optionally substituted

with one or more halogens, a C₂-C₃ thioalkenyl optionally substituted with one or more halogens, a C₂-C₃ thioakynyl, optionally substituted with one or more halogens, a formyl and a nitro;

R²⁰ is selected from a C₄-C₅ alkyl optionally substituted with one or more halogens a C₄-C₅ alkenyl optionally substituted with one or more halogens, a C₄-C₅ akynyl optionally substituted with one or more halogens optionally substituted with one or more halogens, a phenyl optionally substituted with one or more fluorines, a thienyl optionally substituted with one or more fluorines, and a benzyl optionally substituted with one or more R¹⁹:

Y is selected from O, S, N, and C; and

Z is selected from CH₂, NH, and phenylene;

wherein:

if Y is O or S, then each of R^8 and R^9 is null; and

if Y is N, then one of R⁸ and R⁹ is null.

84. The compound of claim 83, wherein:

R¹ is H or halogen:

 R^2 is selected from H, a halogen, a C_1 - C_2 alkyl optionally substituted with one or more fluorines, a C_1 - C_2 alkoxy optionally substituted with one or more fluorines, a C_1 - C_2 thioalkyl optionally substituted with one or more fluorines, and a $NR^{11}R^{12}$;

 R^3 is selected from H, a halogen, a C_1 - C_2 alkyl optionally substituted with one or more halogens, a C_1 - C_2 alkoxy optionally substituted with one or more halogens, a C_1 - C_2 thioalkyl optionally substituted with one or more halogens, and a $NR^{13}R^{14}$;

R⁴ is H or a halogen;

R⁵ is CH₂OH, COOH or a C(R⁵)(R⁵")(COOH); and

 $R^{5'}$ and $R^{5''}$ are each independently selected from H and F; or $R^{5'}$ and $R^{5''}$ together form an O or S.

85. The compound of claim 84, wherein:

 R^{12} and R^{13} are each independently a C_1 - C_3 alkyl optionally substituted with one or more halogens, a C_2 - C_3 alkenyl optionally substituted with one or more halogens, or a C_2 - C_3 akynyl optionally substituted with one or more halogens;

86. The compound of claim 85, wherein:

Y is C or N.

87. The compound claim 85, wherein:

Y is O or S.

- 88. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 83.
- 89. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 84.
- 90. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 85.

91. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 86.

- 92. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 87.
- 93. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 83.
- 94. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 84.
- 95. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 85.
- 96. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 86.
- 97. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 87.
- 98. The method according to any one of claims 93-97, wherein said method comprises treating said patient for a disease or condition selected from the group consisting of: syndrome X, non-insulin dependent diabetes mellitus, cancer, obesity, cardiovascular disease and dyslipidemia.
- 99. A compound of formula VI:

$$R_1$$
 R_3
 R_4
 R_5
 R_7
 R_8

or a pharmaceutically acceptable salt, ester, amide, or prodrug thereof, wherein:

R¹ is selected from H, a halogen, SH, and OH;

R² is selected from H, a halogen, a NR¹²R¹³, a sulfonamide, a nitro, a formyl, an acyl optionally substituted with one or more halogens, a C₁-C₃ alkyl optionally substituted with one or more fluorines, a C₂-C₃ alkenyl optionally substituted with one or more fluorines, a C₁-C₂ alkoxy optionally substituted with one or more fluorines, a C₁-C₂ thioalkyl optionally substituted with one or more fluorines C₂ thioalkenyl optionally substituted with one or more fluorines, a C₂ thioalkynyl optionally substituted with one or more fluorines, and a hydroxylamine optionally substituted with a C₁-C₂ alkyl, a C₂ alkenyl, a C₂ akynyl, a C₁-C₂ fluoroalkyl, a C₂ fluoroalkenyl, or a C₂ fluoroakynyl,;

 R^3 is selected from H, a halogen, a nitro, a C_1 - C_{10} alkyl optionally substituted with one or more halogens, a C_2 - C_{10} alkenyl optionally substituted with one or more halogens, a C_2 - C_{10} akynyl, optionally substituted with one or more halogens, a C_1 - C_{10} alkoxy optionally substituted with one or more halogens, a C_1 - C_{10} thioalkyl optionally substituted with one or more halogens, a C_2 - C_{10} thioalkenyl optionally substituted with one or more halogens, a C_2 - C_{10} thioalkynyl optionally substituted with one or more

halogens, a NR¹⁴R¹⁵, and a five to six-membered carbocyclic or heterocyclic ring optionally substituted with up to two R¹⁹ groups;

R⁴ is selected from H, a halogen, and OH;

R⁵ is selected from CH₂OH, CHO, COOH, and a C(R⁵)(R⁵)(COOH);

R^{5'} and R^{5"} are each independently selected from H, O, S and F; or R^{5'} and R^{5"} together form an O or S;

 R^{12} and R^{13} are each independently a C_1 - C_3 alkyl optionally substituted with one or more halogens, a C_2 - C_3 alkenyl optionally substituted with one or more halogens, or a C_2 - C_3 akynyl optionally substituted with one or more halogens; or R^{12} and R^{13} taken together with the nitrogen atom to which they are both bound form a five to sixmembered heterocyclic ring;

R¹⁴ and R¹⁵ are each independently a C₁-C₂ alkyl optionally substituted with one or more halogens, a C₂ alkenyl optionally substituted with one or more halogens, or a C₂ akynyl, optionally substituted with one or more halogens;

R¹⁹ is selected from a halogen, a C₁-C₄ alkyl optionally substituted with one or more fluorines, a C₂-C₄ alkenyl optionally substituted with one or more fluorines, a C₂-C₄ akynyl optionally substituted with one or more fluorines, a C₁-C₄ alkoxy optionally substituted with one or more halogens, a C₁-C₃ thioalkyl optionally substituted with one or more halogens, a C₂-C₃ thioalkenyl optionally substituted with one or more halogens, a C₂-C₃ thioakynyl optionally substituted with one or more halogens, a formyl and a nitro; and

A is selected from O, CH₂, CF₂, and S.

100. The compound of claim 99, wherein:

R¹ is H or halogen;

 R^2 is selected from H, a halogen, a C_1 - C_2 alkyl optionally substituted with one or more fluorines, a C_1 - C_2 alkoxy optionally substituted with one or more fluorines, a C_1 - C_2 thioalkyl optionally substituted with one or more fluorines, and a $NR^{11}R^{12}$;

R³ is selected from H, a halogen, a C₁-C₂ alkyl optionally substituted with one or more halogens, a C₁-C₂ alkoxy optionally substituted with one or more halogens, a C₁-C₂ thioalkyl optionally substituted with one or more halogens, and a NR¹³R¹⁴;

R⁴ is H or a halogen;

R⁵ is CH₂OH, COOH or a C(R⁵)(R⁵")(COOH);

 $R^{5'}$ and $R^{5''}$ are each independently selected from H and F; or $R^{5'}$ and $R^{5''}$ together form an O or S; and

101. The compound of claim 100, wherein:

A is O or CH₂.

102. The compound of claim 100, wherein:

A is CF₂ or S.

103. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 99.

104. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 100.

- 105. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 101.
- 106. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 102.
- 107. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 99.
- 108. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 100.
- 109. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 101.
- 110. A method of treating a patient comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 102.
- 111. The method according to any one of claims 107-110, wherein said method comprises treating said patient for a disease or condition selected from the group consisting of: syndrome X, non-insulin dependent diabetes mellitus, cancer, obesity, cardiovascular disease and dyslipidemia.

112. A compound selected from the group consisting of;

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethoxy-2-naphthalenyl]benzoyl benzoic acid (Compound 103);

4-[5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-1-hydroxy-2-naphthalenyl]benzoyl benzoic acid (Compound 104);

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-(1,1,1-trifluoroethoxy)-2-naphthalenyl]benzoyl benzoic acid (Compound 105);

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-propoxy-2-naphthalenyl]benzoyl benzoic acid (Compound 106);

4-[5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-4-nitro-2-naphthalenyl]benzoyl benzoic acid (Compound 108);

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethoxy-4-nitro-2-naphthalenyl]benzoyl benzoic acid (Compound 109);

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-(2,2-difluoroethoxy)-4-nitro-2-naphthalenyl]benzoyl benzoic acid (Compound 110);

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-methoxy-2-naphthalenyl)methyl]benzoic acid (Compound 117);

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-iso-propoxy-2-naphthalenyl)methyl]benzoic acid (Compound 118);

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4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethoxy-2-naphthalenyl)methyl]benzoic acid (Compound 119);
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4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-(1,1,1-trifuoroethoxy)-2-naphthalenyl)methyl]benzoic acid (Compound 120);

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-propoxy-2-naphthalenyl)methyl]benzoic acid (Compound 121);

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-butoxy-2-naphthalenyl)methyl]benzoic acid (Compound 122);

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-heptoxy-2-naphthalenyl)methyl]benzoic acid (Compound 123);

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-methyl-4-*p*-tolenesulfonamido-2-naphthalenyl) methyl]benzoic acid (Compound 124);

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-methyl-4-ethylamino-2-naphthalenyl)methyl]benzoic acid (Compound 125);

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-methyl-4-propylamino-2-naphthalenyl)methyl] benzoic acid (Compound 126);

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-(2-fluorophenyl)-2-naphthalenyl]benzoyl benzoic acid (Compound 128);

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-phenyl-2-naphthalenyl]benzoyl benzoic acid (Compound 129);

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-(3-thienyl)-2-naphthalenyl]benzoyl benzoic acid (Compound 130);

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-(4-fluorophenyl)-2-naphthalenyl]benzoic acid (Compound 131);

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-(3-nitrophenyl)-2-naphthalenyl]benzoic acid (Compound 132);

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-(*N*-methyl-*N*-ethylamino)-2-naphthalenyl]benzoyl benzoic acid (Compound 134);

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-(2-fluorophenyl)-4-nitro-2-naphthalenyl]benzoic acid (Compound 136);

4-[(5,6,7,8-tetrahydro-3,8,8-trimethyl-4-nitro-2-naphthalenyl)benzoyl] benzoic acid (Compound 137);

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-1-fluoro-3-ethoxy-2-naphthalenyl]benzoyl benzoic acid (Compound 141);

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-1-fluoro-3-ethoxy-4-nitro-2-naphthalenyl] benzoyl benzoic acid (Compound 142);

4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethoxy-2-naphthalenyl]benzoyl-3-chloro-benzoic acid (Compound 144);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-tetramethyl-2-naphthalenyl)(2-fluorobenzyloxy) methyl] benzoic acid (Compound 149);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)(4-fluorobenzyloxy) methyl]benzoic acid (Compound 150);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)(2-thifluoromethoxy benzyloxy) methyl]benzoic acid (Compound 151);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-tetramethyl-2-naphthalenyl)(2,3-difluorobenzyloxy) methyl] benzoic acid (Compound 152);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-tetramethyl-2-naphthalenyl)(4-trifluoromethyl benzyloxy) methyl] benzoic acid (Compound 153);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)(4-trifluoromethoxy benzyloxy) methyl] benzoic acid (Compound 154);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)(4-trifluorothiomethoxy benzyloxy) methyl] benzoic acid (Compound 155);

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethoxy-2-naphthalenyl)(2,3-difluoro benzyloxy) methyl]benzoic acid (Compound 156);

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethoxy-2-naphthalenyl)(4-fluoro benzyloxy)methyl] benzoic acid (Compound 157);

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethoxy-2-naphthalenyl)(2-fluorobenzyloxy)methyl] benzoic acid (Compound 158);

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethoxy-2-naphthalenyl) (benzyloxy)methyl]benzoic acid (Compound 159);

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethoxy-2-naphthalenyl) (butyloxy)methyl]benzoic acid (Compound 160);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)(phenylacetamido) methyl] benzoic acid (Compound 162);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)(3-fluorobenzylamino) methyl] benzoic acid (Compound 163);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)(4-fluorobenzylamino) methyl] benzoic acid (Compound 164);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)(benzylamino) methyl] benzoic acid (Compound 165);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)(4-trifluoromethyl phenoxy)methyl]benzoic acid (Compound 166);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)(4-tert-butylbenzylthio)methyl] benzoic acid (Compound 167);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)(4-fluorophenyloxy)methyl]benzoic acid (Compound 168);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)(4-tert-butylphenyloxy) methyl]benzoic acid (Compound 169);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)(4-phenylphenyloxy) methyl]benzoic acid (Compound 170);

4-[(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)(4-phenoxy) methyl]benzoic acid (Compound 171);

4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethoxy-2-naphthalenyl)(4-tert-butylbenzylthio) methyl]benzoic acid (Compound 172);

4-[(phenylhydrazino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)]benzoic acid (Compound 173);

4-[(phenylhydrazino)(5,6,7,8-tetrahydro-3,5,5,8,8-centamethyl-2-naphthalenyl)] benzoic acid (Compound 174);

4-[(phenylhydrazino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-4-ethoxy-2-naphthalenyl)]benzoic acid (Compound 175);

4-[(Pyridine-2-hydrazonyl)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethyloxy-2-naphthalenyl)]benzoyl benzoic acid (Compound 176);

4-[(2,4-difluorophenylhydrazino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-4-ethoxy-2-naphthalenyl)]benzoic acid (Compound 177);

4-[(2,5-difluorophenylhydrazino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-4-ethoxy-2-naphthalenyl)]benzoic acid (Compound 178);

4-[(2,5-dimethylphenylhydrazino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-4-ethoxy-2-naphthalenyl)]benzoic acid (Compound 179);

4-[(2-fluorophenylhydrazino)(5,6,7,8-tetrahydro-3,5,5,8,8-pentamethyl-2-naphthalenyl)]benzoic acid (Compound 180);

4-[(phenylimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-4-ethoxy-2-naphthalenyl)] benzoic acid (Compound 183);

4-[(4,4,4-trifluorobutoximino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethyloxy-2-naphthalenyl)]benzoic acid (Compound 184);

4-[(ethoxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethyloxy-2-naphthalenyl)] benzoic acid (Compound 185);

4-[(propoxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethyloxy -2-naphthalenyl)]benzoic acid (Compound 186);

4-[(butoxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethyloxy-2-naphthalenyl)]benzoic acid (Compound 187);

4-[(pentoxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethyloxy-2-naphthalenyl)]benzoic acid (Compound 188);

4-[(hexyloxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethyloxy-2-naphthalenyl)]benzoic acid (Compound 189);

4-[(3-methyl-butoxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethyloxy-2-naphthalenyl)] benzoic acid (Compound 190);

4-[(decyloxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethyloxy-2-naphthalenyl)]benzoic acid (Compound 191);

4-[(2,3-difluorobenzyloxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethyloxy-2-naphthalenyl)] benzoic acid (Compound 192);

6-(2,3-dihydro-4,4-dimethyl-7-ethoxybenzopyranyl)benzoyl benzoic acid (Compound 201);

- 6-[(2,3-dihydro-4,4-dimethyl-7-ethoxy-benzothiopyranyl)]benzoyl benzoic acid (Compound 202);
- 6-(2,3-dihydro-4,4,7-trimethyl-8nitro-benzopyranyl)benzoyl benzoic acid (Compound 203);
- 7-[1,4,4-trimethyl-5-methyl-6-methoxy1,2,3,4-tetrahydroquinoline]benzoyl benzoic acid (Compound 212);
- 7-[1,4,4-trimethyl-5-methyl-6-ethoxy1,2,3,4-tetrahydroquinoline]benzoyl benzoic acid (Compound 213);
- 4-[(5,6,7,8-tetrahydro-3,8,8-trimethyl-2-naphthalenyl)ethenyl] benzoic acid (Compound 214);
- 2-Oxo-2-[4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-ethyloxy-2-naphthalenyl]phenyl]acetic acid (compound 217); and
- 2-Oxo-2-[4-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-methyl-2-naphthalenyl]phenyl]acetic acid (compound 218);
 - and pharmaceutically acceptable salts, esters, amides, and prodrugs thereof.
- 113. A pharmaceutical agent comprising a pharmaceutically acceptable carrier and a compound of claim 112.

114. A method of treating a patient having a disease or condition selected from the group of syndrome X, non-insulin dependent diabetes mellitus, cancer, obesity, cardiovascular disease and dyslipidemia comprising administering to said patient a pharmaceutical agent comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of a compound of claim 112.